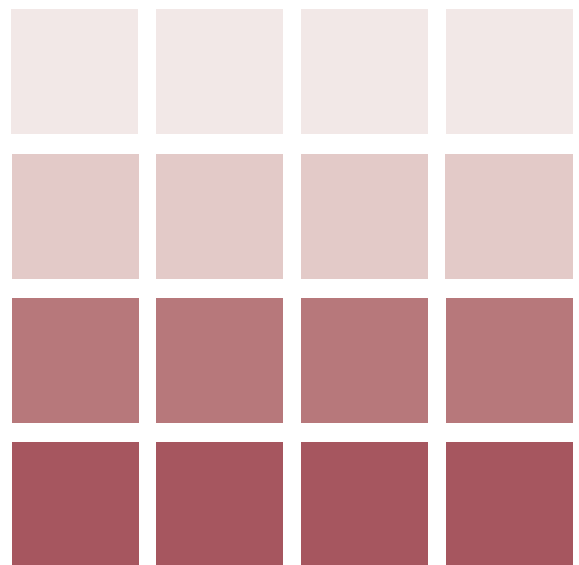


# 2015

## INVESTMENT REPORT

PUBLIC EMPLOYEE RETIREMENT ADMINISTRATION COMMISSION



## **Commission Members**

**Philip Y. Brown**

*Chairman*

**The Honorable Suzanne M. Bump**

*Auditor of the Commonwealth*

*Vice Chairman*

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*Practice Area Director, Public Consulting Group*

**Kate Fitzpatrick**

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*President Emeritus of the Professional*

*Firefighters of Massachusetts*

**Jennifer F. Sullivan**

*Assistant Secretary for Capital Finance,*

*Administration & Finance*

**Joseph E. Connarton**

*Executive Director*

## **Public Employee Retirement Administration Commission**

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## LETTER FROM THE | EXECUTIVE DIRECTOR

We are pleased to release this Investment Report for 2015. Following the adoption of Chapter 68 of the Acts of 2007, the Public Employee Retirement Administration Commission (PERAC) began issuing an Investment Report containing investment and funding results prior to the issuance of our Annual Report which contains a more exhaustive analysis of the activities of the Massachusetts' public pension systems. Chapter 68 of the Acts of 2007 mandates that systems that do not meet certain investment and funding standards transfer assets to the Pension Reserves Investment Trust Fund (PRIT) to be invested by the Pension Reserves Investment Management Board (PRIM). In light of the impact that these results may have on some systems, the Commission believes that it is imperative that this data be disseminated as soon as possible. We anticipate that the full Annual Report for 2015 will be ready for distribution in the early summer.

The two comparative components established under Chapter 68 are funded ratio and 10 year investment performance. The funded ratio standard is 65% and, based on investment performance results for 2015, the investment standard is 3.86% (PRIM 10 year return 5.86% minus 2.00%).

PERAC, in Memo #35, 2007, outlined the principles that it would apply in conducting analysis pursuant to that law. It is suggested that Boards review those principles. Such a review is particularly important to Boards that may be subject to a Chapter 68 Order this year.

This report delineates investment returns for several periods: 2015, 2011-2015 inclusive, 2006-2015 inclusive, and since inception through 2015. The funded ratios are as of the date of the most recent valuation available to PERAC. Ratios based on actuarial valuations received after April 1, 2015 have not been included in this Report, however such valuations will be used to conduct the Chapter 68 analysis.

PERAC has completed its analysis of system funded status and investment performance in accordance with Chapter 68 of the Acts of 2007. Applying the tests set forth in that statute PERAC has determined that no retirement board will be ordered to transfer its assets to the Pension Reserves Investment Trust Fund (PRIT) based on 2015 results.

This Report is the result of the efforts of the PERAC Investment Unit and particularly Senior Investment Analyst Vicky Marcorelle and Investment Analyst Veronica Colon.

I hope you find the Report informative and helpful as you assess the state of our retirement systems.

Sincerely,

A handwritten signature in black ink that reads "Joseph E. Connarton".

Joseph E. Connarton  
Executive Director

## 2015 RETURNS & ANNUALIZED PAST RETURNS (IN PERCENT) | FUNDED RATIOS

	Return (2015)	5-Year Return	10-Year Return	31-Year Return
ADAMS	-3.33%	4.66%	4.04%	7.69%
AMESBURY	1.12%	7.46%	5.47%	7.92%
ANDOVER	1.34%	7.59%	5.06%	8.29%
ARLINGTON	1.39%	7.54%	4.45%	8.32%
ATTLEBORO	-0.21%	7.94%	6.19%	8.87%
BARNSTABLE COUNTY	1.23%	7.62%	5.41%	7.39%
BELMONT	1.32%	7.95%	7.59%	9.35%
BERKSHIRE COUNTY	1.17%	7.50%	5.90%	8.95%
BEVERLY	1.16%	7.70%	4.86%	8.50%
BLUE HILLS REGIONAL	1.16%	7.55%	5.99%	8.61%
BOSTON (CITY)	-1.13%	6.40%	5.96%	8.82%
BOSTON (TEACHERS)	1.21%	7.48%	N/A	N/A
BRAINTREE	-1.06%	6.26%	5.81%	8.56%
BRISTOL COUNTY	0.40%	7.38%	6.12%	8.83%
BROCKTON	-1.32%	5.76%	4.69%	8.61%
BROOKLINE	1.43%	6.02%	5.13%	8.59%
CAMBRIDGE	-0.07%	8.04%	6.28%	9.23%
CHELSEA	1.22%	7.53%	5.95%	7.87%
CHICOPEE	0.18%	8.03%	6.44%	8.56%
CLINTON	1.52%	7.39%	5.01%	7.62%
CONCORD	0.84%	8.17%	6.23%	8.57%
DANVERS	-1.49%	5.29%	4.97%	7.89%
DEDHAM	1.19%	7.62%	5.99%	9.47%
DUKES COUNTY	4.45%	8.91%	7.02%	7.76%
EASTHAMPTON	1.17%	7.56%	5.92%	8.19%
ESSEX REGIONAL	1.75%	7.84%	5.75%	8.70%
EVERETT	1.22%	7.63%	5.96%	8.37%
FAIRHAVEN	1.17%	7.59%	5.90%	9.26%
FALL RIVER	1.38%	7.56%	5.26%	8.30%
FALMOUTH	0.69%	8.15%	5.90%	8.94%
FITCHBURG	1.09%	7.33%	5.11%	7.54%
FRAMINGHAM	1.13%	7.56%	5.92%	9.23%
FRANKLIN REGIONAL	1.11%	8.49%	6.57%	8.34%
GARDNER	1.15%	7.55%	5.87%	9.35%
GLOUCESTER	1.19%	7.57%	5.46%	8.79%
GREATER LAWRENCE	0.54%	7.31%	6.61%	7.46%

Funded Ratio	Date of Most Recent Valuation
76.7%	1/1/14
53.6%	1/1/14
48.3%	1/1/14
50.9%	1/1/15
65.4%	1/1/14
57.4%	1/1/14
51.2%	1/1/14
82.2%	1/1/15
51.6%	1/1/14
71.0%	1/1/14
70.2%	1/1/14
40.5%	1/1/15
65.8%	1/1/14
61.4%	1/1/14
67.2%	1/1/14
55.7%	1/1/14
79.1%	1/1/14
58.9%	1/1/15
72.8%	1/1/15
63.2%	1/1/15
81.0%	1/1/15
55.5%	1/1/14
80.2%	1/1/14
68.6%	1/1/14
70.6%	1/1/14
48.4%	1/1/14
42.8%	1/1/14
73.6%	1/1/14
41.3%	1/1/15
59.8%	1/1/14
42.5%	1/1/14
67.4%	1/1/14
69.8%	1/1/14
57.0%	1/1/15
44.6%	1/1/14
85.0%	1/1/15

## 2015 RETURNS & ANNUALIZED PAST RETURNS (IN PERCENT) | FUNDED RATIOS

	Return (2015)	5-Year Return	10-Year Return	31-Year Return
GREENFIELD	1.33%	7.74%	5.72%	8.42%
HAMPDEN COUNTY REGIONAL	1.55%	7.57%	5.37%	8.54%
HAMPSHIRE COUNTY	0.32%	6.48%	5.67%	8.19%
HAVERHILL	-1.30%	6.93%	6.15%	9.88%
HINGHAM	-0.49%	6.31%	5.32%	9.01%
HOLYOKE	3.59%	9.23%	6.51%	9.37%
HULL	1.32%	7.54%	5.88%	7.82%
LAWRENCE	1.16%	7.52%	5.29%	7.70%
LEOMINSTER	0.59%	8.25%	6.35%	8.50%
LEXINGTON	0.58%	5.75%	5.18%	8.69%
LOWELL	1.03%	7.42%	5.73%	9.04%
LYNN	1.75%	7.94%	4.98%	7.94%
MALDEN	-1.10%	8.29%	7.02%	9.70%
MARBLEHEAD	1.17%	7.58%	5.95%	9.17%
MARLBOROUGH	-0.56%	6.47%	5.63%	8.30%
MA HOUSING FINANCE (MHFA)	-2.30%	5.57%	4.63%	7.29%
MASSPORT	-0.42%	7.00%	5.91%	8.93%
MA TEACHERS RETIREMENT SYSTEM (MTRS)	1.17%	7.62%	5.96%	9.41%
MA WATER RESOURCES AUTHORITY (MWRA)	1.07%	7.41%	6.67%	8.13%*
MAYNARD	0.45%	8.02%	5.31%	7.86%
MEDFORD	0.46%	6.20%	5.74%	8.80%
MELROSE	0.78%	7.23%	5.29%	8.32%
METHUEN	2.27%	8.22%	5.30%	7.91%
MIDDLESEX COUNTY	1.18%	7.49%	5.64%	8.34%
MILFORD	1.12%	7.41%	4.43%	8.13%
MILTON	1.18%	7.58%	5.82%	9.33%
MINUTEMAN REGIONAL	1.15%	7.31%	5.80%	9.42%
MONTAGUE	1.16%	7.56%	5.91%	9.07%
NATICK	0.76%	8.23%	5.26%	8.02%
NEEDHAM	1.17%	7.45%	5.85%	9.60%
NEW BEDFORD	-0.46%	6.89%	5.75%	7.94%
NEWBURYPORT	1.19%	7.49%	5.85%	8.15%
NEWTON	1.19%	7.57%	5.44%	8.55%
NORFOLK COUNTY	-0.84%	7.11%	5.62%	8.52%
NORTH ADAMS	-0.75%	8.93%	7.43%	9.62%
NORTH ATTLEBORO	2.39%	8.74%	6.37%	8.60%

Funded Ratio	Date of Most Recent Valuation
56.2%	1/1/15
47.2%	1/1/14
56.6%	1/1/14
52.0%	1/1/16
68.1%	1/1/14
58.1%	1/1/14
54.0%	1/1/14
44.6%	1/1/14
79.2%	1/1/14
82.3%	1/1/14
55.0%	1/1/15
45.5%	1/1/15
70.3%	1/1/14
67.0%	1/1/14
70.7%	1/1/15
78.8%	1/1/15
91.0%	1/1/15
54.3%	1/1/15
98.3%	1/1/15
69.1%	1/1/15
61.0%	1/1/14
54.6%	1/1/15
46.6%	1/1/14
44.0%	1/1/14
57.8%	1/1/15
76.6%	1/1/15
86.7%	1/1/15
73.6%	1/1/14
60.8%	1/1/15
68.6%	1/1/15
42.5%	1/1/14
60.8%	1/1/14
50.8%	1/1/15
55.8%	1/1/14
71.1%	1/1/15
79.1%	1/1/15

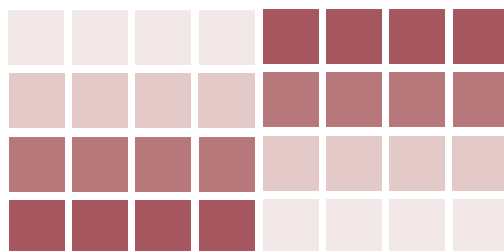
\*Based on 30-year return

## 2015 RETURNS & ANNUALIZED PAST RETURNS (IN PERCENT) | FUNDED RATIOS

	Return (2015)	5-Year Return	10-Year Return	31-Year Return
NORTHAMPTON	-0.10%	8.88%	7.48%	9.44%
NORTHBRIDGE	1.17%	7.61%	5.95%	9.29%
NORWOOD	0.60%	6.85%	6.28%	8.99%
PEABODY	1.18%	7.59%	5.31%	8.56%
PITTSFIELD	1.39%	7.71%	5.12%	8.12%
PLYMOUTH	2.96%	8.42%	6.26%	8.77%
PLYMOUTH COUNTY	0.54%	7.02%	5.58%	9.05%
PRIM BOARD	1.14%	7.53%	5.86%	9.49%
QUINCY	-0.79%	5.97%	4.94%	8.09%
READING	1.24%	7.63%	5.99%	9.22%
REVERE	1.09%	7.42%	5.73%	8.30%
SALEM	0.82%	7.19%	4.94%	8.03%
SAUGUS	1.17%	7.59%	5.95%	9.16%
SHREWSBURY	0.78%	8.37%	6.27%	9.06%
SOMERVILLE	1.04%	8.90%	7.07%	8.94%
SOUTHBRIDGE	1.34%	7.27%	4.25%	7.95%
SPRINGFIELD	1.54%	7.73%	5.74%	8.30%
STATE	1.18%	7.62%	5.97%	9.40%
STONEHAM	1.18%	7.57%	5.95%	8.74%
SWAMPSCOTT	1.50%	8.03%	5.81%	9.03%
TAUNTON	1.49%	7.97%	6.55%	9.59%
WAKEFIELD	1.31%	7.67%	5.98%	9.61%
WALTHAM	1.53%	8.23%	5.59%	8.62%
WATERTOWN	2.42%	7.45%	5.77%	8.26%
WEBSTER	0.74%	7.72%	6.12%	8.07%
WELLESLEY	1.22%	7.63%	5.58%	9.92%
WEST SPRINGFIELD	-1.49%	8.67%	6.01%	8.18%
WESTFIELD	3.52%	9.27%	6.67%	8.77%
WEYMOUTH	0.84%	7.45%	6.01%	9.81%
WINCHESTER	-0.31%	6.29%	5.18%	8.95%
WINTHROP	1.17%	7.24%	5.71%	8.58%
WOBURN	-0.52%	7.71%	6.43%	9.29%
WORCESTER	-0.71%	6.06%	5.30%	8.71%
WORCESTER REGIONAL	0.92%	7.37%	5.03%	8.09%
<b>COMPOSITE</b>	<b>0.91%</b>	<b>7.49%</b>	<b>5.93%</b>	<b>9.14%</b>

Funded Ratio	Date of Most Recent Valuation
63.0%	1/1/14
64.6%	1/1/14
77.0%	1/1/14
49.6%	1/1/14
46.2%	1/1/15
49.2%	1/1/15
58.3%	1/1/15
<b>NOT APPLICABLE</b>	
46.7%	1/1/14
73.0%	1/1/15
53.2%	1/1/15
50.7%	1/1/14
69.5%	1/1/15
72.1%	1/1/14
62.5%	1/1/15
50.8%	1/1/14
27.0%	1/1/14
67.5%	1/1/15
64.5%	1/1/14
48.2%	1/1/15
65.6%	1/1/14
63.5%	1/1/14
55.9%	1/1/15
73.7%	1/1/15
50.7%	1/1/14
73.6%	1/1/15
55.2%	1/1/14
68.4%	1/1/15
64.6%	1/1/14
78.3%	1/1/15
75.9%	1/1/15
64.6%	1/1/14
66.8%	1/1/15
44.9%	1/1/14
<b>NOT APPLICABLE</b>	





**COMMONWEALTH OF MASSACHUSETTS**  
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